ABSTRACT OF THE DISCLOSURE

Polygon data inputted in the first step is subjected to evaluation of all edges of the polygon data on the basis of a volume change due to an edge removal by a predetermined evaluating function in the second step. The edges are sorted on the basis of an evaluation value in the third step. In the fourth step, the edge of a small evaluation value is determined to be an edge of a small influence on a general shape and is removed. In the fifth step, a new vertex is determined from the loss of vertex by the edge removal. In the sixth step, a movement of texture coordinates and a removal of the texture after the edge removal are executed on the basis of the area change of the texture due to the edge removal by a predetermined evaluating function. In the seventh step, by repeating the processes in the second to sixth steps, a polygon model approximated to a desired layer can be obtained.